

skin contact is possible. After use and before removal from the hands, the gloves should be washed in solvents (acetone or alcohols), followed by a water rinse. Before re-use, gloves should be inspected for leaks.

2. The use of eye protection, aprons, or uniforms may be indicated if this is a potential splashing hazard.

3. Smoking should be prohibited.

4. If skin contamination cannot be removed with a mild soap and water, small areas of the skin may be washed with acetone or alcohols, followed by washing with mild soap and water. Petroleum solvents should not be used to clean the skin.

5. Barrier type protective creams have been used with success for dermatitis control in many plants. However, they are not intended to be a substitute for protective clothing or good personal hygiene.

X-Radiation

At this point I would like to take you into the controversial field of x-radiation from TV sets. This is a medical engineering problem; one that has occupied the attention of the medical department over the past many years. It is necessary at this time to separate the facts from fiction and the fantastic.

Man pollutes his world gradually, almost imperceptibly, and in many different ways. One of the least obtrusive ways he has yet invented is the introduction of man-made radiation into the environment. Attention was called dramatically to that kind of pollution last year when a major TV producer placed on the market more than 100,000 TV sets suspected of emitting x-rays. It is a fact that color sets require higher voltage than black-and-white and are capable of producing some x-radiation. In the case of the aforementioned sets, the problem had to do with a shunt regulator tube which regulates the high electron voltage to the picture tube. Due to engineering error, this tube was poorly shielded and mounted in a position which permitted x-rays to escape from the set. Further investigation with other manufacturers' sets revealed that different kinds of design or servicing problems could account for defective control of color TV x-radiation.

TV set x-radiation can be thoroughly controlled by proper shielding, set design,

and monitoring levels at time of manufacture. The level of radiation from the vast majority of defective sets as identified by the United States Public Health Service represented no known risk to the health of viewers, though in a few cases there were high levels of excessive radiation—as high as 25 or more times the accepted limits. The main concern was over possible harm to descendants of the viewers, but even that seemed highly improbable. It is the medical department's responsibility, in cooperation with the engineers, to keep radiation from TV sets at the proper level. This level can easily be maintained below 0.5 milliroentgen per hour, the limit accepted by science, government, and industry as prudent in a world where man is adding significantly to the radiation dose bequeathed by nature. TV set producers are now providing consumer and technician-proof sets incapable of producing excessive radiation despite the most flagrant tampering. However, the problems of x-radiation still exist in the manufacturing and testing area, and therefore require constant monitoring, medical engineering supervision, and control. We have demonstrated that a properly constructed color TV set offers no health hazard whatsoever.

The following letter, authorized by a competent medical authority, is for the edification of our customers and available for general public information:

"Color and black-and-white television sets manufactured by Sylvania Electric Products, Inc., G.T.&E., more than satisfy all the safety requirements of the National Council of Radiation Protection Measurements, as well as those of the International Commission on Radiological Protection."

Sylvania subjects its television production lines to exacting scientific tests for emission of x-radiation. In addition, we periodically employ outside scientists to make independent tests of our sets, both in the plant and after they have left the factories. These tests employ stringent government-accepted and industry-accepted methods of measurement. Constantly, our engineers conduct tests for x-radiation on our color television sets in production and as consumer products. All tests showed that in more than nine out of ten instances the Sylvania sets showed no detectable x-radiation whatsoever. The only reading in these tests was the background